S/M Code No.88-021 DATE OF ISSUE 4/1988-I

AIWA®

HS-J202
HS-J202M
HS-J800

SERVICE MANUAL

STEREO RADIO CASSETTE RECORDER

• BASIC TAPE MECHANISM : α −1

• TYPE. H, U, C, E, K, Z

SPECIFICATIONS

Frequency range:	FM: 87.5-108 (108.1) MHz AM: 531 (530)-1,611 (1,610) kHz
Maximum output:	15mW+15mW (EIAJ/32Ω) [20mW+20mW (EIAJ/16Ω)]
Power Source:	Battery DC 2V, rechargeable lead battery (AIWA) × 1 Battery DC 3V, LR-03 (UM-4, AAA, R03) × 2 Domestic AC power (using AC adaptor)
Battery life:	Rechargeable lead battery (AIWA) Approx. 2 hours (EIAJ, PB 1mW/1 hour recharging) Approx. 1.5 hours (EIAJ, REC/1 hour recharging) Alkaline batteries (LR-03, AAA) Approx. 4 hours (EIAJ, PB 1mW)

- Design and specifications are subject to change without notice.
- Noise reduction system manufactured under license from Dolby Laboratories Licensing Corporation.
- Dolby and the □□ symbol are trademarks of Dolby Laboratories Licensing Corporation.

AIWA Co., Ltd.

Tokyo Japan

Printed in Japan

DISASSEMBLY INSTRUCTIONS

1. Control Panel, Rear Cabinet and Center Frame Removal
   1) Remove 3 screws Ⓐ and take out the control panel.
   2) Remove 3 screws Ⓑ and take out the rear cabinet in the direction of arrow ①.
   3) Remove 2 screws Ⓒ and release ② hooks, then take out the center frame in the direction of arrow ②. (See Fig. 1)

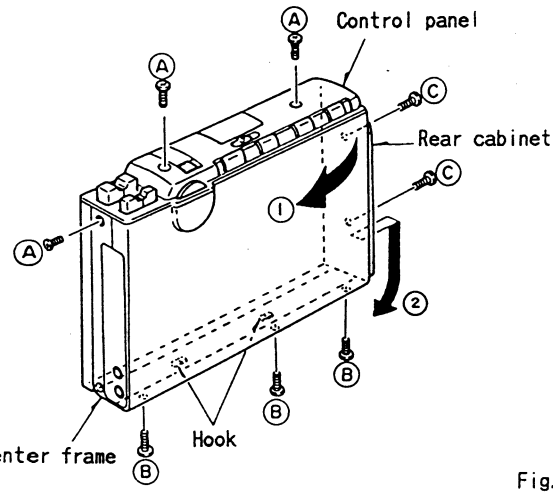


Fig. 1

2. Cassette Lid Removal
   1) Remove 3 screws and release the cassette holder lock. (See Fig. 2)

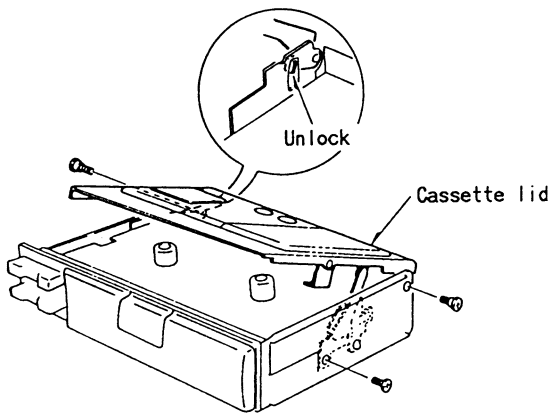


Fig. 2

3. Main Circuit Board Removal
   1) Remove 2 screws. (See Fig. 3)

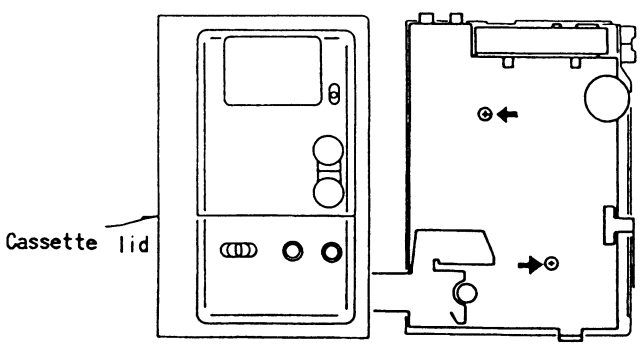


Fig. 3

4. Cassette Holder Removal
   1) Remove 5 screws. (See Fig. 4)

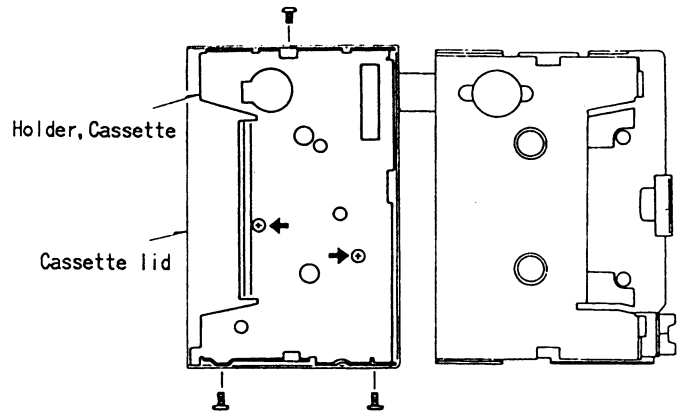


Fig. 4

5. Front Circuit Board Removal
   1) Remove 2 screws. (See Fig. 5)

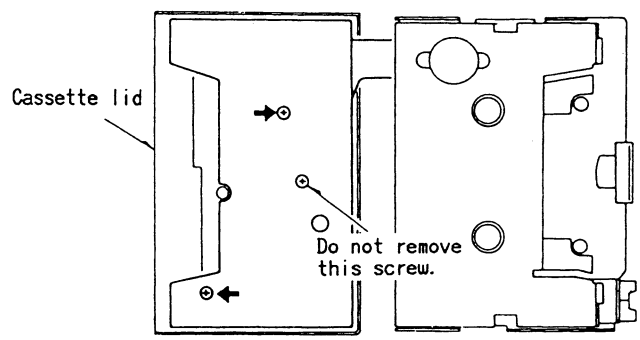


Fig. 5

6. PLAY Button Removal
   1) Remove the control panel and rear cabinet.
   2) Move the PLAY button in the direction of arrow A by 1.5mm to release the lock and pull it up in the direction of arrow B to remove it. (See Fig. 6)

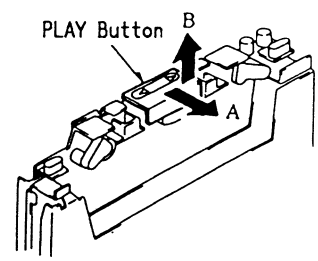


Fig. 6

ELECTRICAL MAIN PARTS LIST

REF.NO.	PART NO.	DESCRIPTION
=== IC ===		
	87-001-351-010	IC,AN6612S
	87-001-147-010	IC,BA1102FS
	87-001-146-010	IC,BA1362FS
	87-001-148-010	IC,BA4230FS
	87-001-373-010	IC,CXA1278N
	87-001-189-010	IC,IR9393N
	87-020-234-010	IC,TA7688F(S)
	87-001-145-010	IC,TA8126F
	87-001-149-010	IC,TA8158F
	87-001-152-010	IC,TC9308-009
	87-001-151-010	IC,TD6134AF1
=== TRANSISTOR ===		
	89-502-094-010	FET,2SK209Y
	89-508-824-010	FET,2SK882Y
	89-508-805-010	FET,2SK880 GR
	89-112-134-010	TRANSISTOR,2SA1213Y
	89-115-864-010	TRANSISTOR,2SA1586Y
	89-115-884-010	TRANSISTOR,2SA1588Y
	89-341-165-010	TRANSISTOR,2SC4116GR
	89-342-132-010	TRANSISTOR,2SC4213B
	89-342-153-010	TRANSISTOR,2SC4215 0
	87-026-356-010	TRANSISTOR,FMC1
	87-026-299-010	TRANSISTOR,FMG4
	87-026-298-010	TRANSISTOR,FMW1
	87-026-437-010	TRANSISTOR,IMB3
	87-026-436-010	TRANSISTOR,IMB6
	87-026-407-010	TRANSISTOR,IMX2
	87-026-417-010	TRANSISTOR,RN1310
	87-026-429-010	TRANSISTOR,RN2311
=== DIODE ===		
	87-001-142-010	DIODE CHIP 1SS294
	87-001-165-010	DIODE CHIP 1SS300
	87-001-166-010	DIODE CHIP 1SS301
	87-001-167-010	DIODE CHIP 1SS302
=== MAIN CIRCUIT BOARD SECTION ===		
PCB-A	*	MAIN CIRCUIT BOARD
BPF1	★87-030-151-141	FILTER BPF GEWE1
C1	★87-012-274-010	CAP,CHIP SS 1000P,B,K
C2	★87-010-317-010	CAP,CHIP S 39P,CH
C3	87-010-154-010	CAP,CHIP 10P
C4	★87-012-286-010	CAP,CHIP S 0.01,B,K
C6	★87-010-125-010	CAP,CHIP SS 330P
C7	★87-012-174-010	CAP,CHIP SS 12P
C8	★87-012-231-010	CAP,CHIP SS 100P,RH,J
C9	★87-012-176-010	CAP,CHIP SS 15P,CH,J
C10	★87-012-165-010	CAP,CHIP SS 3P,CH,J
C11	★87-012-286-010	CAP,CHIP S 0.01,B,K
C13	★87-012-274-010	CAP,CHIP SS 1000P,B,K
C14	★87-012-168-010	CAP,CHIP SS 6P.CH,D
C15	★87-012-195-010	CAP,CHIP SS 100P,CH,J
C16	★87-010-224-010	CAP,CHIP TANTALUM 100-4V
C17	★87-012-286-010	CAP,CHIP S 0.01,B,K
C18	★87-012-286-010	CAP,CHIP S 0.01,B,K
C19	★87-012-286-010	CAP,CHIP S 0.01,B,K
C20	★87-010-196-010	CAP,CHIP 0.1
C21	★87-012-286-010	CAP,CHIP S 0.01,B,K
C22	★87-010-668-010	CAP,CHIP ELECT 220-4V,MV
C23	★87-012-199-010	CAP,CHIP SS 220P
C24	★87-012-286-010	CAP,CHIP S 0.01,B,K
C25	★87-010-243-010	CAP,CHIP TANTALUM 10/4
C26	★87-012-195-010	CAP,CHIP SS 100P,CH,J
C27	★87-012-286-010	CAP,CHIP S 0.01,B,K
C28	★87-012-270-010	CAP,CHIP SS 470P, B,K
C29	★87-010-198-010	CAP,CHIP 0.022
C30	★87-010-243-010	CAP,CHIP TANTALUM 10/4
C31	★87-010-667-010	CAP,CHIP ELECT 100-4V,MV
C32	★87-010-594-010	CAP,CHIP S 0.033-16VRK
C33	★87-012-270-010	CAP,CHIP SS 470P BK
C34	★87-012-197-010	CAP,CHIP SS 150P,CH
C36	★87-012-274-010	CAP,CHIP SS 1000P,B,K
C37	★87-010-198-010	CAP,CHIP 0.022
C38	★87-010-198-010	CAP,CHIP 0.022
C39	★87-012-286-010	CAP,CHIP S 1000P,B,K
C40	★87-010-187-010	CAP,CHIP SS 5600P
C41	★87-012-168-010	CAP,CHIP SS 6P.CH,D
C42	★87-012-198-010	CAP,CHIP SS 180P,CH,J
C43	★87-012-286-010	CAP,CHIP S 0.01,B,K
C44	★87-012-273-010	CAP,CHIP SS,820P,B,K
C45	★87-010-243-010	CAP,CHIP TANTALUM 10/4
C46	★87-012-286-010	CAP,CHIP S 0.01,B,K
C47	★87-012-286-010	CAP,CHIP S 0.01,B,K
C48	★87-012-286-010	CAP,CHIP S 0.01,B,K
C49	★87-010-668-010	CAP,CHIP ELECT 220-4V,MV
C50	★87-012-274-010	CAP,CHIP SS 1000P,B,K
C51	★87-012-176-010	CAP,CHIP SS 15P,CH,J
C52	★87-012-274-010	CAP,CHIP SS 1000P,B,K
C53	★87-012-286-010	CAP,CHIP S 0.01,B,K
C54	★87-010-191-010	CAP,CHIP S 0.015(U,C ONLY)
C54	★87-012-286-010	CAP,CHIP S 0.01,B,K(EXCEPT U,C)
C55	★87-010-191-010	CAP,CHIP S 0.015(U,C ONLY)
C55	★87-012-286-010	CAP,CHIP S 0.01,B,K(EXCEPT U,C)
C56	★87-012-140-010	CAP,CHIP S 470P CH
C57	★87-012-140-010	CAP,CHIP S 470P CH
C58	★87-010-450-010	CAP,CHIP 0.47U
C59	★87-012-141-010	CAP,CHIP S 0.22
C60	★87-012-141-010	CAP,CHIP S 0.22
C61	★87-010-450-010	CAP,CHIP 0.47U
C62	★87-012-274-010	CAP,CHIP SS 1000P,B,K
C63	★87-012-141-010	CAP,CHIP S 0.22
C64	★87-010-452-010	CAP,CHIP 1U
C67	★87-010-452-010	CAP,CHIP 1U
C68	★87-010-452-010	CAP,CHIP 1U
C75	★87-010-664-010	CAP,CHIP ELECT 47-4V,MV
C76	★87-012-286-010	CAP,CHIP S 0.01,B,K
C101	★87-012-272-010	CAP,CHIP SS 680P,B,K
C102	★87-012-272-010	CAP,CHIP SS 680P,B,K
C103	★87-010-215-010	CAP,CHIP TANTALUM 0.047-35
C104	★87-010-215-010	CAP,CHIP TANTALUM 0.047-35
C105	★87-012-284-010	CAP,CHIP SS 6800P,B,K
C106	★87-012-284-010	CAP,CHIP SS 6800P,B,K
C107	★87-010-426-010	CAP,CHIP S 0.012
C108	★87-010-426-010	CAP,CHIP S 0.012
C109	★87-012-278-010	CAP,CHIP SS 2200P,B,K
C110	★87-012-278-010	CAP,CHIP SS 2200P,B,K
C111	★87-010-243-010	CAP,CHIP TANTALUM 10/4
C112	★87-010-243-010	CAP,CHIP TANTALUM 10/4
C113	★87-010-452-010	CAP,CHIP 1U
C114	★87-010-452-010	CAP,CHIP 1U
C115	★87-012-276-010	CAP,CHIP SS 1500P BK
C116	★87-012-276-010	CAP,CHIP SS 1500P BK
C117	★87-012-274-010	CAP,CHIP SS 1000P,B,K
C118	★87-012-274-010	CAP,CHIP SS 1000P,B,K
C119	★87-012-274-010	CAP,CHIP SS 1000P,B,K
C120	★87-012-274-010	CAP,CHIP SS 1000P,B,K
C121	★87-010-452-010	CAP,CHIP 1U
C122	★87-010-452-010	CAP,CHIP 1U
C123	★87-010-594-010	CAP,CHIP S 0.033-16VRK
C124	★87-010-594-010	CAP,CHIP S 0.033-16VRK
C125	★87-012-282-010	CAP,CHIP SS 4700P,B,K
C126	★87-012-282-010	CAP,CHIP SS 4700P,B,K
C127	★87-010-424-010	CAP,CHIP TANTALUM 4.7-4V
C128	★87-010-424-010	CAP,CHIP TANTALUM 4.7-4V
C129	★87-012-286-010	CAP,CHIP S 0.01,B,K
C130	★87-012-286-010	CAP,CHIP S 0.01,B,K
C131	★87-010-594-010	CAP,CHIP S 0.033-16VRK
C132	★87-010-594-010	CAP,CHIP S 0.033-16VRK
C133	★87-010-196-010	CAP,CHIP 0.1
C134	★87-010-196-010	CAP,CHIP 0.1
C135	★87-012-270-010	CAP,CHIP SS 470P, B,K
C136	★87-012-270-010	CAP,CHIP SS 470P, B,K
C137	★87-012-274-010	CAP,CHIP SS 1000P,B,K
C138	★87-012-274-010	CAP,CHIP SS 1000P,B,K
C139	★87-010-452-010	CAP,CHIP 1U
C140	★87-010-452-010	CAP,CHIP 1U
C141	★87-010-674-010	CAP,CHIP ELECT 220-2V,MV
C142	★87-010-674-010	CAP,CHIP ELECT 220-2V,MV
C143	★87-010-664-010	CAP,CHIP ELECT 47-4V,MV
C144	★87-010-640-010	CAP,CHIP TANTALUM 22-4F95
C145	★87-010-243-010	CAP,CHIP TANTALUM 10/4
C146	★87-010-243-010	CAP,CHIP TANTALUM 10/4
C147	★87-010-243-010	CAP,CHIP TANTALUM 10/4
C148	★87-010-243-010	CAP,CHIP TANTALUM 10/4
C149	★87-012-270-010	CAP,CHIP SS 470P, B,K
C150	★87-012-286-010	CAP,CHIP S 0.01,B,K
C151	★87-010-180-010	CAP,CHIP SS 1500P,B,K
C152	★87-012-286-010	CAP,CHIP S 0.01,B,K
C153	★87-012-280-010	CAP,CHIP SS 3300P,B,K
C154	★87-012-286-010	CAP,CHIP S 0.01,B,K
C155	★87-010-424-010	CAP,CHIP TANTALUM 4.7-4V
C156	★87-010-668-010	CAP,CHIP ELECT 220-4V,MV
C157	★87-010-673-010	CAP,CHIP ELECT 100-2
C158	★87-010-668-010	CAP,CHIP ELECT 220-4V,MV
C159	★87-010-668-010	CAP,CHIP ELECT 220-4V,MV
C160	★87-010-664-010	CAP,CHIP ELECT 47-4V,MV
C161	★87-010-662-010	CAP,CHIP ELECT 22-6.3MV
C162	★87-012-286-010	CAP,CHIP S 0.01,B,K
C163	★87-010-452-010	CAP,CHIP 1U
C164	★87-010-452-010	CAP,CHIP 1U
C165	★87-015-934-010	CAP,CHIP TANTALUM 2.2-4
C166	★87-010-594-010	CAP,CHIP S 0.033-16VRK
C167	★87-010-452-010	CAP,CHIP 1U
C168	★87-010-424-010	CAP,CHIP TANTALUM 4.7-4V
C169	★87-010-668-010	CAP,CHIP ELECT 220-4V,MV
C170	★87-015-934-010	CAP,CHIP TANTALUM 2.2-4
C171	★87-010-198-010	CAP,CHIP 0.022
C172	★87-010-198-010	CAP,CHIP 0.022
C173	★87-012-286-010	CAP,CHIP S 0.01,B,K
C174	★87-010-452-010	CAP,CHIP 1U
C175	★87-010-452-010	CAP,CHIP 1U
C201	★87-012-286-010	CAP,CHIP S 0.01,B,K
C202	★87-010-668-010	CAP,CHIP ELECT 220-4V,MV
C203	★87-012-141-010	CAP,CHIP S 0.22
C204	★87-012-141-010	CAP,CHIP S 0.22
C206	★87-010-317-010	CAP,CHIP 39P,CH
C207	★87-010-184-010	CAP,CHIP S 3300P
CF1	★87-008-389-010	CF SFE 10.7MS3W,A
CF2	★87-008-379-010	CF SFE 10.7MS5,A
CF3	★87-008-377-010	CF 450KHZ,UM
J1	87-049-725-010	JACK DIA3.5(RED)(MIC)
J2	87-049-724-010	JACK 3.5(BLACK)(PHONES)
J3	87-049-859-010	JACK DC(DC2V)
L1	★84-462-618-010	COIL CHIP
L2	★84-462-626-010	COIL CHIP FM RF
L3	★84-462-627-010	COIL CHIP FM OSC
L6	★87-005-258-010	COIL CHIP 2.2UH
L7	★87-005-260-010	COIL CHIP 4.7UH
L9	★87-006-151-010	COIL CHIP OSC AM
L10	★87-006-152-010	COIL CHIP IFT AM
L11	★87-006-150-010	COIL CHIP DET,FM
L14	★87-003-218-010	COIL,CHOKE CHIP 1U
L15	★87-007-246-010	COIL CHIP BIAS OSC
Q110	87-026-248-010	PHOTO SENSOR ON2270Q2
R160	★87-022-043-010	RES,CHIP M,M/F 8.2K-1/8
R163	★87-022-042-010	RES,M,M/F 0.51-1/8
S1	87-036-123-010	SLIDE SW(TAPE)
S2	87-036-123-010	SLIDE SW(DOLBY NR,FM ST)
S3	87-036-123-010	SLIDE SW(PAUSE)
S4	87-036-124-010	SLIDE SW(RADIO/TAPE)
S5	87-036-083-010	PUSH SW(POWER)
S6	87-036-082-010	SLIDE SW(REC/PB)
SFR1	★87-024-092-010	SFR 10KRVG4
SFR101	★87-024-080-010	SFR 10K
SFR102	★87-024-080-010	SFR 10K
SFR103	★87-024-076-010	SFR 1K
TC1	★87-011-192-010	TRIMMER CHIP 30P
TC3	★87-011-189-010	TRIMMER CHIP 10P
TH101	★87-026-244-010	THERMISTOR NTH1021A
VC1	87-026-359-010	DIODE,VAR CHIP KV1410
VC2	87-026-359-010	DIODE,VAR CHIP KV1410
VC3	87-011-209-010	DIODE,VAR SVC341
VR1	87-024-142-010	VOLUME 20K-C(VOLUME)
=== CONTROL CIRCUIT BOARD SECTION ===		
PCB-B	★84-462-624-010	CONTROL CIRCUIT BOARD
BAT1	★84-462-614-010	CL BATT
C77	★87-010-424-010	CAP,CHIP TANTALUM 4.7-4V
C78	★87-010-424-010	CAP,CHIP TANTALUM 4.7-4V
C80	★87-010-452-010	CAP,CHIP 1U
C81	★87-012-286-010	CAP,CHIP S 0.01,B,K
C82	★87-012-276-010	CAP,CHIP SS 1500P BK
C83	★87-012-199-010	CAP,CHIP SS 220P
C84	★87-010-452-010	CAP,CHIP 1U
C85	★87-010-196-010	CAP,CHIP 0.1
C86	★87-010-424-010	CAP,CHIP TANTALUM 4.7-4V
C87	★87-012-172-010	CAP,CHIP SS 10P,CH,D
C88	★87-012-286-010	CAP,CHIP S 0.01,B,K
C89	★87-012-286-010	CAP,CHIP S 0.01,B,K
C90	★87-010-196-010	CAP,CHIP 0.1
C91	★87-010-196-010	CAP,CHIP 0.1
C92	★87-012-286-010	CAP,CHIP S 0.01,B,K
C93	★87-010-196-010	CAP,CHIP 0.1
C94	★87-012-184-010	CAP,CHIP 33P,CH,J
C95	★87-012-195-010	CAP,CHIP SS 100P,CH,J
C96	★87-012-286-010	CAP,CHIP S 0.01,B,K
C97	★87-010-505-010	CAP,CHIP TANTALUM 1-16V
C98	★87-012-286-010	CAP,CHIP S 0.01,B,K
C99	★87-010-424-010	CAP,CHIP TANTALUM 4.7-4V
C205	★87-012-188-010	CAP,CHIP SS 47P,CH
D7	87-020-508-010	LED(OPE/BATT)
L12	★87-007-233-010	COIL CHIP DD CP-4LBM
L13	★87-005-262-010	COIL CHIP 10UH

REF.NO.
LCD1
S7
S8
S9
S10
S11
S12
TC4
X1
=== TERM
PCB-C
TM1
=== HEAD
PCB-D
RPH
S13
=== CONN
PCB-E
=== REG.
PCB-F
C1
TM2
=== MIS
EH
L8
M1

Combin

PCB-A

PCB-C

	REF.NO.	PART NO.	DESCRIPTION
ALUM 10/4	C120	★87-012-274-010	CAP,CHIP SS 1000P,B,K
00P,CH,J	C121	★87-010-452-010	CAP,CHIP 1U
01,B,K	C122	★87-010-452-010	CAP,CHIP 1U
70P, B,K	C123	★87-010-594-010	CAP,CHIP S 0.033-16VRK
2	C124	★87-010-594-010	CAP,CHIP S 0.033-16VRK
ALUM 10/4	C125	★87-012-282-010	CAP,CHIP SS 4700P,B,K
T 100-4V,MV	C126	★87-012-282-010	CAP,CHIP SS 4700P,B,K
033-16VRK	C127	★87-010-424-010	CAP,CHIP TANTALUM 4.7-4V
70P BK	C128	★87-010-424-010	CAP,CHIP TANTALUM 4.7-4V
50P,CH	C129	★87-012-286-010	CAP,CHIP S 0.01,B,K
000P,B,K	C130	★87-012-286-010	CAP,CHIP S 0.01,B,K
2	C131	★87-010-594-010	CAP,CHIP S 0.033-16VRK
2	C132	★87-010-594-010	CAP,CHIP S 0.033-16VRK
00P,B,K	C133	★87-010-196-010	CAP,CHIP 0.1
500P	C134	★87-010-196-010	CAP,CHIP 0.1
P.CH,D	C135	★87-012-270-010	CAP,CHIP SS 470P, B,K
50P,CH,J	C136	★87-012-270-010	CAP,CHIP SS 470P, B,K
01,B,K	C137	★87-012-274-010	CAP,CHIP SS 1000P,B,K
00P,B,K	C138	★87-012-274-010	CAP,CHIP SS 1000P,B,K
ALUM 10/4	C139	★87-010-452-010	CAP,CHIP 1U
1,B,K	C140	★87-010-452-010	CAP,CHIP 1U
01,B,K	C141	★87-010-674-010	CAP,CHIP ELECT 220-2V,MV
01,B,K	C142	★87-010-674-010	CAP,CHIP ELECT 220-2V,MV
T 220-4V,MV	C143	★87-010-664-010	CAP,CHIP ELECT 47-4V,MV
000P,B,K	C144	★87-010-640-010	CAP,CHIP TANTALUM 22-4F95
5P,CH,J	C145	★87-010-243-010	CAP,CHIP TANTALUM 10/4
000P,B,K	C146	★87-010-243-010	CAP,CHIP TANTALUM 10/4
01,B,K	C147	★87-010-243-010	CAP,CHIP TANTALUM 10/4
015(U,C ONLY)	C148	★87-010-243-010	CAP,CHIP TANTALUM 10/4
01,B,K(EXCEPT U,C)	C149	★87-012-270-010	CAP,CHIP SS 470P, B,K
015(U,C ONLY)	C150	★87-012-286-010	CAP,CHIP S 0.01,B,K
01,B,K(EXCEPT U,C)	C151	★87-010-180-010	CAP,CHIP SS 1500P,B,K
0P CH	C152	★87-012-286-010	CAP,CHIP S 0.01,B,K
0P CH	C153	★87-012-280-010	CAP,CHIP SS 3300P,B,K
U	C154	★87-012-286-010	CAP,CHIP S 0.01,B,K
22	C155	★87-010-424-010	CAP,CHIP TANTALUM 4.7-4V
22	C156	★87-010-668-010	CAP,CHIP ELECT 220-4V,MV
J	C157	★87-010-673-010	CAP,CHIP ELECT 100-2
00P,B,K	C158	★87-010-668-010	CAP,CHIP ELECT 220-4V,MV
22	C159	★87-010-668-010	CAP,CHIP ELECT 220-4V,MV
	C160	★87-010-664-010	CAP,CHIP ELECT 47-4V,MV
	C161	★87-010-662-010	CAP,CHIP ELECT 22-6.3MV
	C162	★87-012-286-010	CAP,CHIP S 0.01,B,K
T 47-4V,MV	C163	★87-010-452-010	CAP,CHIP 1U
01,B,K	C164	★87-010-452-010	CAP,CHIP 1U
0P,B,K	C165	★87-015-934-010	CAP,CHIP TANTALUM 2.2-4
0P,B,K	C166	★87-010-594-010	CAP,CHIP S 0.033-16VRK
LUM 0.047-35	C167	★87-010-452-010	CAP,CHIP 1U
LUM 0.047-35	C168	★87-010-424-010	CAP,CHIP TANTALUM 4.7-4V
00P,B,K	C169	★87-010-668-010	CAP,CHIP ELECT 220-4V,MV
00P,B,K	C170	★87-015-934-010	CAP,CHIP TANTALUM 2.2-4
012	C171	★87-010-198-010	CAP,CHIP 0.022
012	C172	★87-010-198-010	CAP,CHIP 0.022
200P,B,K	C173	★87-012-286-010	CAP,CHIP S 0.01,B,K
200P,B,K	C174	★87-010-452-010	CAP,CHIP 1U
ALUM 10/4	C175	★87-010-452-010	CAP,CHIP 1U
ALUM 10/4	C201	★87-012-286-010	CAP,CHIP S 0.01,B,K
	C202	★87-010-668-010	CAP,CHIP ELECT 220-4V,MV
	C203	★87-012-141-010	CAP,CHIP S 0.22
500P BK	C204	★87-012-141-010	CAP,CHIP S 0.22
500P BK	C206	★87-010-317-010	CAP,CHIP 39P,CH
000P,B,K	C207	★87-010-184-010	CAP,CHIP S 3300P
000P,B,K	CF1	★87-008-389-010	CF SFE 10.7MS3W,A
000P,B,K	CF2	★87-008-379-010	CF SFE 10.7MS5,A
	CF3	★87-008-377-010	CF 450KHZ,UM
	J1	87-049-725-010	JACK DIA3.5(RED)(MIC)
	J2	87-049-724-010	JACK 3.5(BLACK)(PHONES)
	J3	87-049-859-010	JACK DC(DC2V)
	L1	★84-462-618-010	COIL CHIP
	L2	★84-462-626-010	COIL CHIP FM RF
	L3	★84-462-627-010	COIL CHIP FM OSC
	L6	★87-005-258-010	COIL CHIP 2.2UH
	L7	★87-005-260-010	COIL CHIP 4.7UH
	L9	★87-006-151-010	COIL CHIP OSC AM
	L10	★87-006-152-010	COIL CHIP IFT AM
	L11	★87-006-150-010	COIL CHIP DET,FM
	L14	★87-003-218-010	COIL,CHOKE CHIP 1U
	L15	★87-007-246-010	COIL CHIP BIAS OSC
	Q110	87-026-248-010	PHOTO SENSOR ON2270Q2
	R160	★87-022-043-010	RES,CHIP M,M/F 8.2K-1/8
	R163	★87-022-042-010	RES,M,M/F 0.51-1/8
	S1	87-036-123-010	SLIDE SW(TAPE)
	S2	87-036-123-010	SLIDE SW(DOLBY NR,FM ST)
	S3	87-036-123-010	SLIDE SW(PAUSE)
	S4	87-036-124-010	SLIDE SW(RADIO/TAPE)
	S5	87-036-083-010	PUSH SW(POWER)
	S6	87-036-082-010	SLIDE SW(REC/PB)
	SFR1	★87-024-092-010	SFR 10KRVG4
	SFR101	★87-024-080-010	SFR 10K
	SFR102	★87-024-080-010	SFR 10K
	SFR103	★87-024-076-010	SFR 1K
	TC1	★87-011-192-010	TRIMMER CHIP 30P
	TC3	★87-011-189-010	TRIMMER CHIP 10P
	TH101	★87-026-244-010	THERMISTOR NTH1021A
	VC1	87-026-359-010	DIODE,VAR CHIP KV1410
	VC2	87-026-359-010	DIODE,VAR CHIP KV1410
	VC3	87-011-209-010	DIODE,VAR SVC341
	VR1	87-024-142-010	VOLUME 20K-C(VOLUME)

=== CONTROL CIRCUIT BOARD SECTION ===

	PCB-B	★84-462-624-010	CONTROL CIRCUIT BOARD
	BAT1	★84-462-614-010	CL BATT
	C77	★87-010-424-010	CAP,CHIP TANTALUM 4.7-4V
	C78	★87-010-424-010	CAP,CHIP TANTALUM 4.7-4V
	C80	★87-010-452-010	CAP,CHIP 1U
	C81	★87-012-286-010	CAP,CHIP S 0.01,B,K
	C82	★87-012-276-010	CAP,CHIP SS 1500P BK
	C83	★87-012-199-010	CAP,CHIP SS 220P
	C84	★87-010-452-010	CAP,CHIP 1U
	C85	★87-010-196-010	CAP,CHIP 0.1
	C86	★87-010-424-010	CAP,CHIP TANTALUM 4.7-4V
	C87	★87-012-172-010	CAP,CHIP SS 10P,CH,D
	C88	★87-012-286-010	CAP,CHIP S 0.01,B,K
	C89	★87-012-286-010	CAP,CHIP S 0.01,B,K
	C90	★87-010-196-010	CAP,CHIP 0.1
	C91	★87-010-196-010	CAP,CHIP 0.1
	C92	★87-012-286-010	CAP,CHIP S 0.01,B,K
	C93	★87-010-196-010	CAP,CHIP 0.1
	C94	★87-012-184-010	CAP,CHIP 33P,CH,J
	C95	★87-012-195-010	CAP,CHIP SS 100P,CH,J
	C96	★87-012-286-010	CAP,CHIP S 0.01,B,K
	C97	★87-010-505-010	CAP,CHIP TANTALUM 1-16V
	C98	★87-012-286-010	CAP,CHIP S 0.01,B,K
	C99	★87-010-424-010	CAP,CHIP TANTALUM 4.7-4V
	C205	★87-012-188-010	CAP,CHIP SS 47P,CH
	D7	87-020-508-010	LED(OPE/BATT)
	L12	★87-007-233-010	COIL CHIP DD CP-4LBM
	L13	★87-005-262-010	COIL CHIP 10UH

REF.NO.	PART NO.	DESCRIPTION
LCD1	84-462-604-010	LCD HS ASSY
S7	87-036-123-010	SLIDE SW(HOLD)
S8	87-036-048-010	SLIDE SW(BAND)
S9	87-030-152-010	TACT SW(UP/HOUR)
S10	87-030-152-010	TACT SW(DOWN/MIN)
S11	87-036-079-010	TACT SW(MEMORY)
S12	87-036-079-010	TACT SW(STORE/SET)
TC4	★87-011-192-010	TRIMMER CHIP CTZ30C
X1	★87-030-121-010	CRYSTAL DT-38 75K

=== TERMINAL CIRCUIT BOARD SECTION ===

PCB-C	*	TERMINAL CIRCUIT BOARD
TM1	★84-435-246-010	CONNECTOR ASSY 1.4

=== HEAD CIRCUIT BOARD SECTION ===

PCB-D	*	HEAD CIRCUIT BOARD
RPH	84-462-610-010	RPH ASSY(W/PCB-D)
S13	84-541-602-010	SLIDE SW(FWD/REW)

=== CONNECT CIRCUIT BOARD SECTION ===

PCB-E	★84-462-603-010	CONNECT CIRCUIT BOARD

=== REGULATOR CIRCUIT BOARD SECTION ===

PCB-F	★84-464-604-110	REGULATOR CIRCUIT BOARD
C1	★84-439-620-010	CAP,ELECT 470-4V
TM2	★84-435-246-010	CONNECTOR ASSY 1.4(BATT.TERMINAL)

=== MISCELLANEOUS ===

EH	86-541-601-010	EH
L8	84-462-617-010	BAR ANT COIL
M1	87-045-283-010	MOTOR

Combination Circuit Board 84-462-621-010

PCB-A 84-462-622-010

PCB-C 84-462-623-010

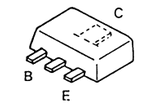
PRACTICAL SERVICE FIGURE

<Radio Block>

Sensitivity :	
(THD, 3%)	FM 13±4dB (98MHz)(EXCEPT U,C,MH
	FM 13±4dB (98.1MHz)(U,C,MH ONLY
(S/N 10dB)	AM 53±4dB (999kHz)(EXCEPT U,C,M
	AM 53±4dB (1,000kHz)(U,C,MH ONL
Intermediate frequency :	FM 10.7MHz
	AM 450kHz
FM stereo separation :	20±4dB (1kHz)

<Tape Recorder Block>

S/N ratio :	50±3dB (PB)
	Less than 30dB (REC/PB)
Distortion :	Less than 3% (PB)
	Less than 10% (REC/PB)
Noise level :	Less than 3.0mV (AC VOL max.)
Bias frequency :	54kHz
Erasing ratio :	More than 50dB (1kHz)
Wow & flutter :	Less than 0.45% (FWD) RMS
	Less than 0.48% (REV) RMS
Pinch roller press :	155±15g (FWD)
	135±15g (REV)
Forward torque :	30^{+10}_{5} g-cm (FWD, REV)
FF/Rewind torque :	100^{+30}_{-20} g-cm



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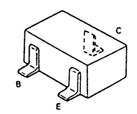

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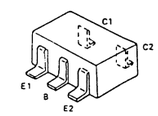
2SC4215
RN1310
RN2311



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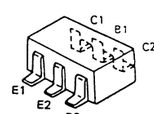

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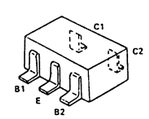
IMB6



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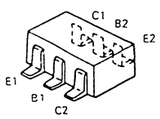
FMW1



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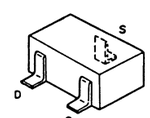

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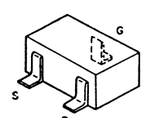

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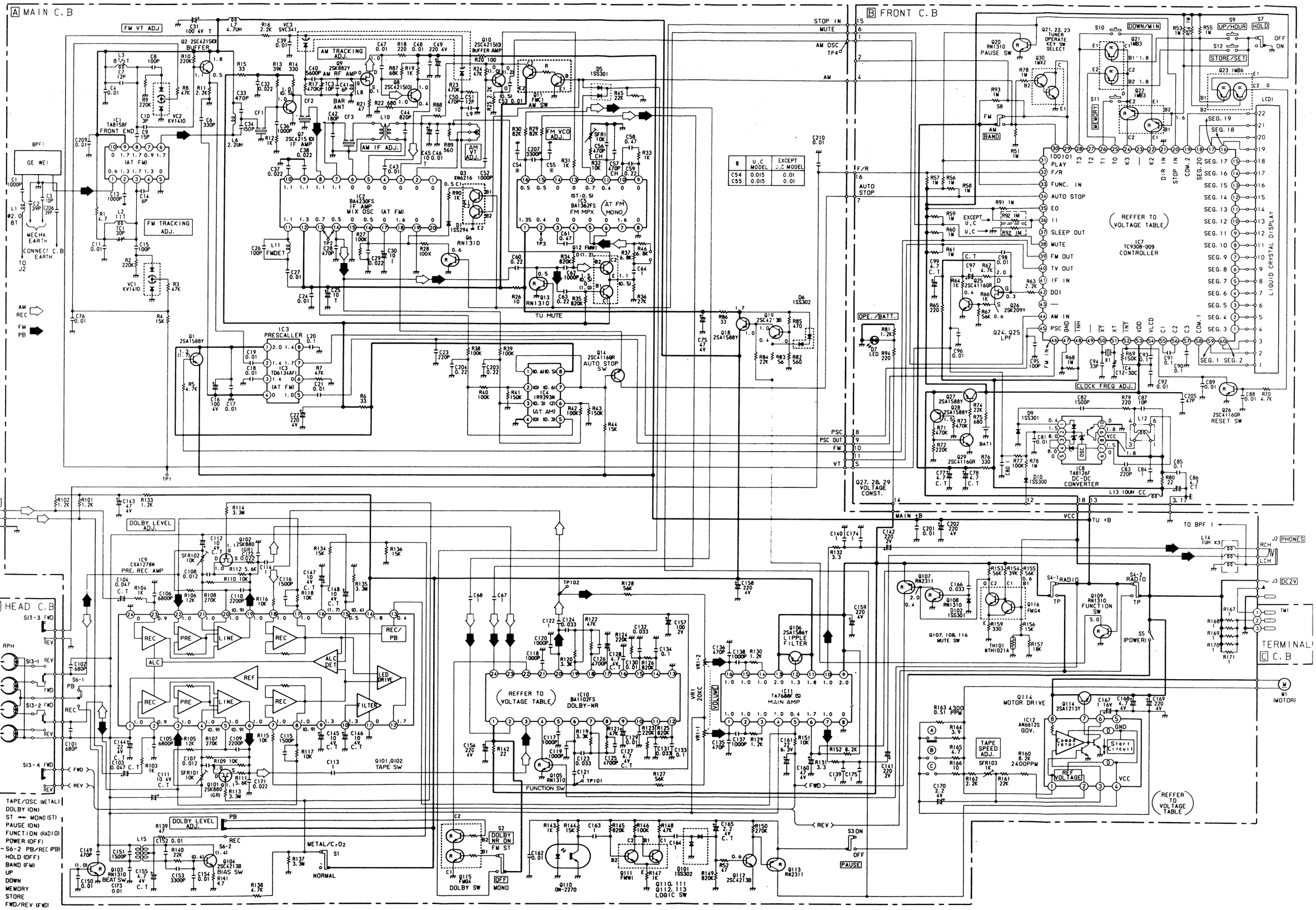


IC TC93

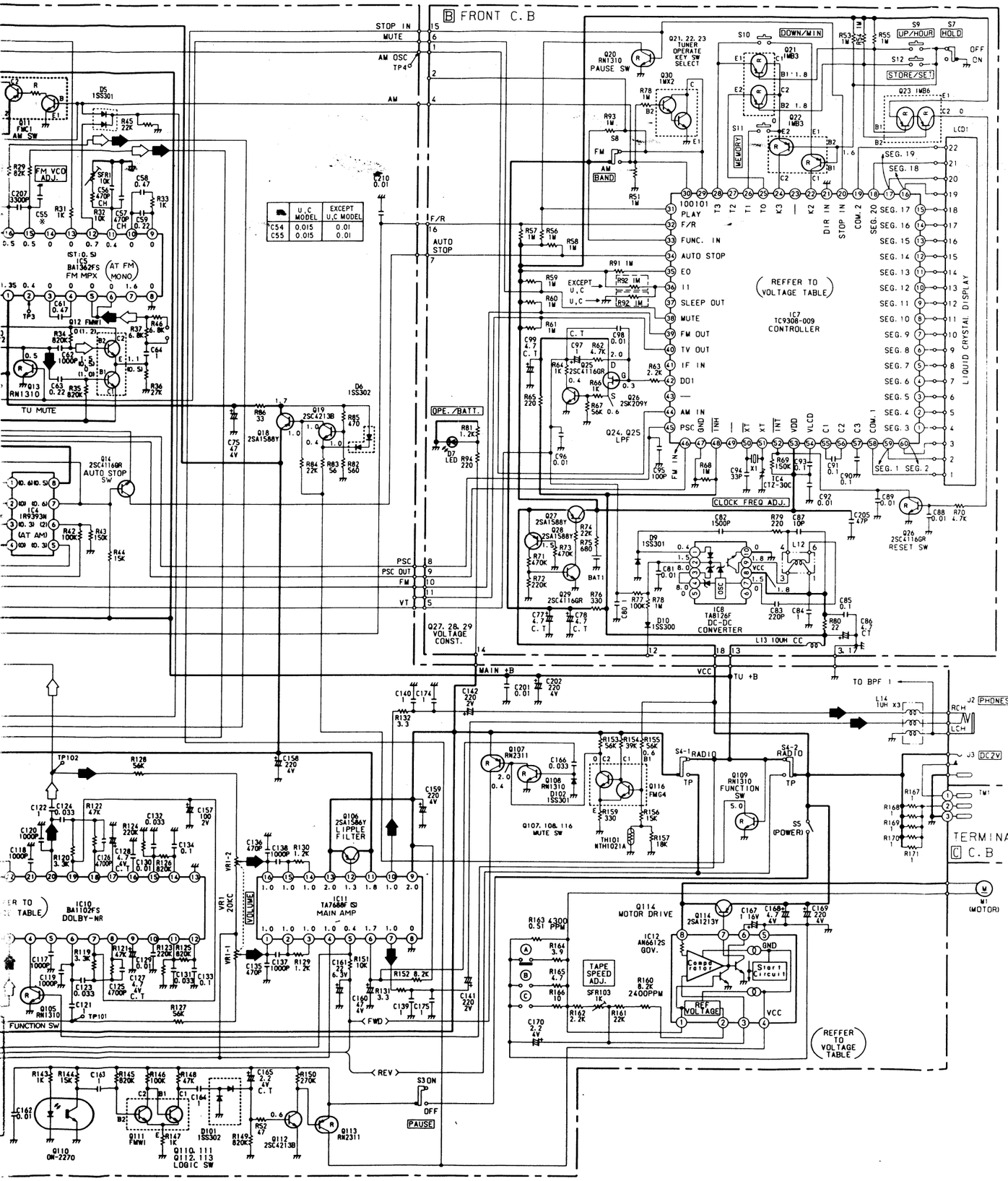
PIN NO.	1
AM	0.5
FM	0.5
PIN NO.	21
AM	0.0
FM	0.0
PIN NO.	41
AM	0.2
FM	0.2

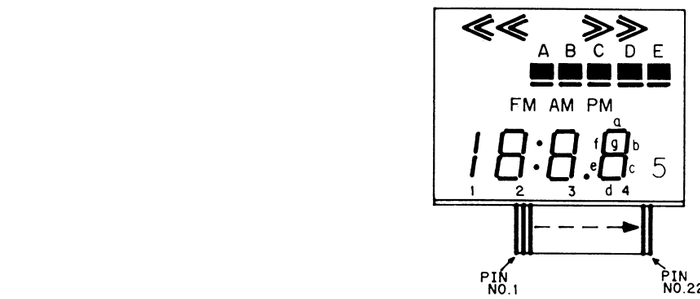
IC BA1102

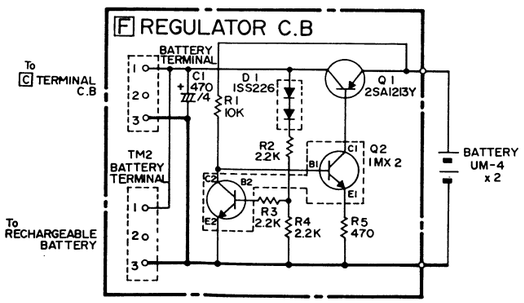
PIN NO.	
DOLBY IN	1.
DOLBY OFF	1.
TUNER	1.
REC	1.

IC AN6612

PIN NO.	1
PLAY	0.0
STOP	0.0
PAUSE	0.0







IC TC9308-009

PIN NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
AM	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0
FM	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0
PIN NO.	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
AM	0.0	0.0	2.0	0.0	2.0	2.0	2.0	2.0	0.5	1.9	1.8	1.8	1.9	1.9	1.8	1.8	0.0	0.0	1.9	1.8
FM	0.0	0.0	2.0	0.0	2.0	2.0	2.0	2.0	2.0	0.1	1.8	1.8	1.9	1.7	0.0	0.0	0.0	0.0	0.1	1.8
PIN NO.	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
AM	0.2	0.3	0.6	1.1	0.0	0.0	0.0	2.0	0.0	1.2	0.9	2.0	2.0—1.0		1.3—0.0		0.5	0.5	0.5	0.5
FM	0.2	0.3	0.2	0.0	1.7	1.0	0.0	2.0	0.0	1.0	1.0	2.0	2.0—1.0		1.3—0.0		0.5	0.5	0.5	0.5

IC BA1102 FS

PIN NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
DOLBY IN	1.9	1.1	1.1	0.7	1.1	1.1	1.1	1.1	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1	1.1	1.1	1.1	0.8	1.1	1.1
DOLBY OFF	1.9	1.1	1.1	0.7	1.1	1.1	1.1	1.1	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1	1.1	1.1	1.1	0.0	1.1	1.1
TUNER	1.9	1.1	1.1	0.0	1.1	1.1	1.1	1.1	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1	1.1	1.1	1.1	0.8	1.1	1.1
REC	1.9	1.1	1.1	0.8	1.1	1.1	1.1	1.1	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1	1.1	1.1	1.1	0.8	1.1	1.1

IC AN6612S

PIN NO.	1	2	3	4	5	6	7	8
PLAY	0.0	1.3	0.2	2.0	0.0	0.7	1.4	1.5
STOP	0.0	0.0	0.0	0.0	0.0	0.0	1.9	0.0
PAUSE	0.0	0.0	0.0	0.0	0.0	0.0	1.9	0.0

LCD 1
LCD
DISPLAY

PIN NO.	COM.1	COM.2
1		COM 2
2	B	A
3	D	C
4	—	E
5	FM	I
6	2b	2f
7	2g	2e
8	2c	2d
9	2a	AM
10	3d	3f
11	3g	3e
12	3c	3d
13	3a	• •
14	4b	4f
15	4g	4e
16	4c	4d
17	4a	PM
18		5
19	•	RIGHT SIDE ≫
20	LEFT SIDE ≫	
21	RIGHT SIDE ≪	LEFT SIDE ≪
22	COM 1	

D HEAD C.B

S13 (FWD/REV)
REV
FWD
S4 TAPE/ POWER OFF
RADIO
S3 PAUSE
OFF
ON
S2 OFF
MONO
FM ST
DOLBY NR ON
To SHIELD PLATE
S1 NORMAL
METAL/ CrO2
RPH

E CONNECT C.B

M1 (MOTOR)
BLU
RED

A MAIN C.B

VR1 VOLUME
S6 REC/PB
PB ↔ REC
L8 (AM BAR ANTENNA)

C TERMINAL C.B
TM1 BATTERY TERMINAL

A MAIN C.B

J3 DC2V
J2 PHONES
J1 MIC

F REGULATOR C.B
TM2 BATTERY TERMINAL

C TERMINAL C.B

TM1
BATTERY
TERMINAL

A MAIN C.B

A MAIN C.B

B CONTROL C.B

E CONNECT C.B

S11
MEMORY

S12
STORE/SET

S10
DOWN / MIN

TUNING/
TIME SET

S9
UP / HOUR

S7
HOLD
OFF
↓
ON

S8
BAND
AM ⟷ FM

D7
OPE/BATT

J3
DC2V

J2
PHONES

J1
MIC

BLK
YEL
RED
BLK

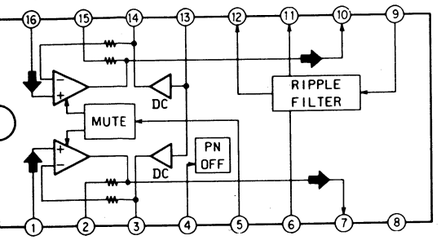
BATTERY
UM-4x2

TM2 BATTERY
TERMINAL

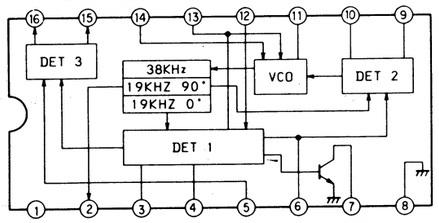
F REGULATOR C.B

BLOCK DIAGRAM

TA7688FS



BA 1362FS



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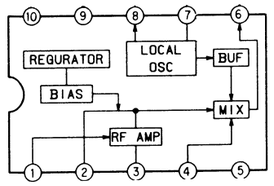

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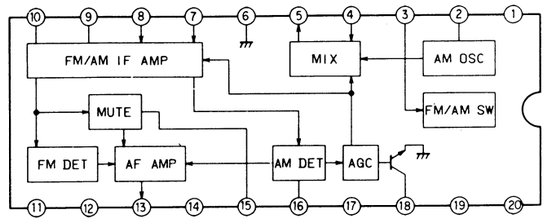
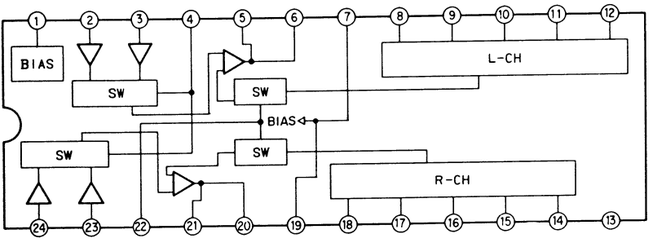
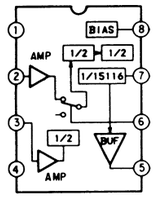


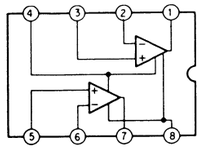
BA1102FS



TD6134AF1



IR9393N

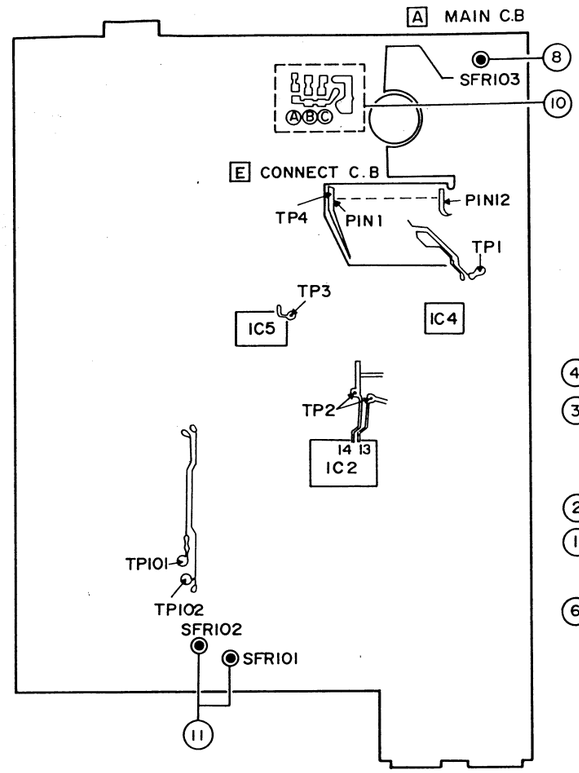


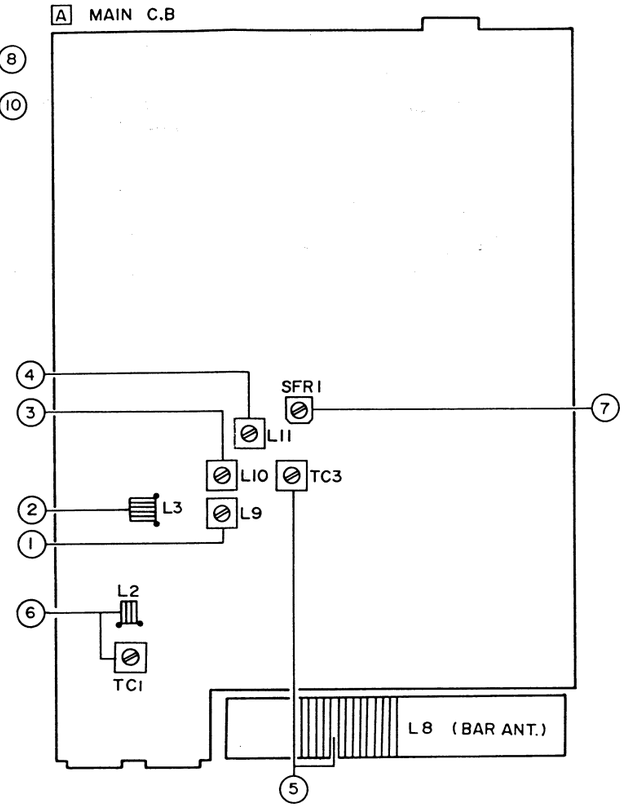
IC Description

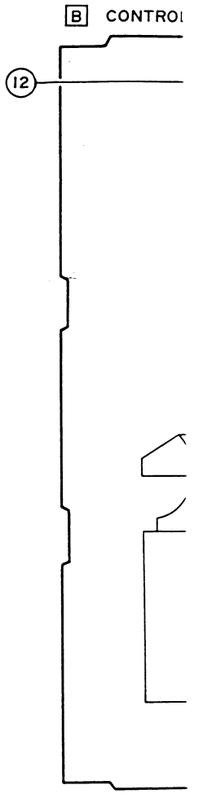
IC, AN6612S

Pin No.	Pin Name	Description
1	VRN	Input terminal for motor current detection
2	VRP	Output terminal for reference voltage
3	VIN	Output terminal for reference voltage control
4	VCC	Power supply terminal
5	GND	GND terminal
6	VB	Terminal for prevention of oscillation
7	VBO	Output terminal for the motor speed of control
8	VM	Input terminal for the motor speed of detection

ADJUSTMENT







1. AM VT Adjustment
   Settings : · Test point : TP1
   · Adjustment location : L9
   Method : Tune to AM 1610kHz(U,C model), AM 1611kHz (Except U,C model) and adjust L9 so the voltage at TP1 is 8.0±0.05V. After adjustment is completed, check that it is 0.5V or more at TP1 with the AM 530kHz(U,C model), AM 531kHz(Except U,C model) signal.

2. FM VT Adjustment
   Settings : · Test point : TP1
   · Adjustment location : L3
   Method : Tune to FM 108.1MHz(U,C model), FM 108MHz (Except U,C model) and adjust L3 so the voltage at TP1 is 9.0±0.05V. After adjustment is completed, check that it is 1.0V or more at TP1 with the FM 87.5MHz signal.

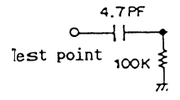
3. AM IF Adjustment
   L10 · · · · · · · · · · · · · · · · 450kHz

4. FM IF Offset Adjustment
   Settings : · Input signal : 98.1MHz(U,C model), 54dB
   98.0MHz(Except U,C model), 54dB
   · Test point : TP2
   · Adjustment location : L11
   Method : Adjust L11 so the voltage at TP2 is 0±25mV.

5. AM Tracking Adjustment
   L8 · · · · · · · · · · · · · · · 600kHz(U,C model)
   603kHz(Except U,C model)
   TC3 · · · · · · · · · · · · · · · 1400kHz(U,C model)
   1395kHz(Except U,C model)

6. FM Tracking Adjustment
   L2 · · · · · · · · · · · · · · · 87.5MHz
   TC1 · · · · · · · · · · · · · · · 108.1MHz(U,C model)
   108.0MHz(Except U,C model)

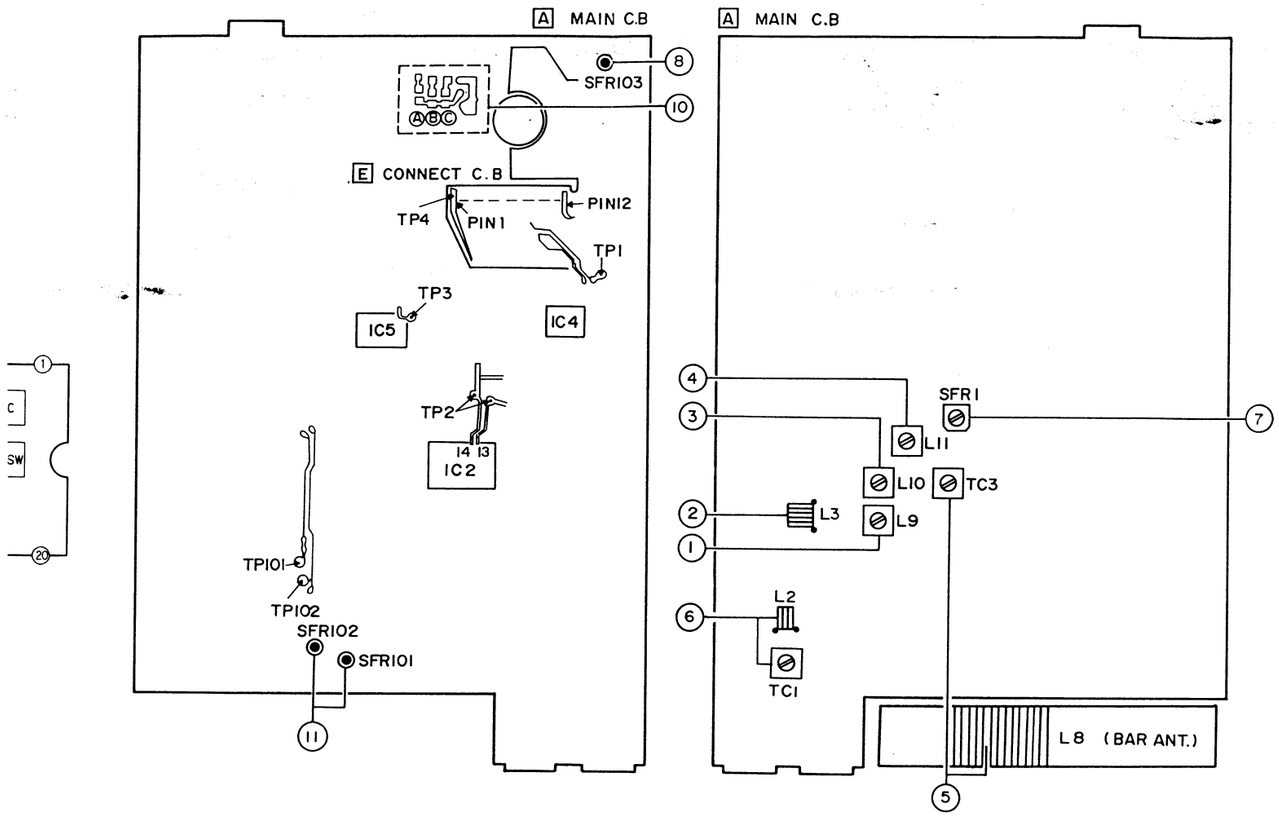
7. FM VCO Adjustment
   Settings : · Test point : TP3
   · Adjustment location : SFR1
   Method : Connect a buffer to TP3. Adjust SFR1 so the frequency at TP3 is 19kHz±20Hz.



8. Tape Speed Adju
   Settings : · Tes
   · Adj
   Method : Play b

9. Azimuth Adjustm
   Settings : · Tes
   · Adj
   Method : Play b
   and ad

10. Motor Load Ad
    Refer to the se



1. AM VT Adjustment
   Settings : · Test point : TP1
   · Adjustment location : L9
   Method : Tune to AM 1610kHz(U,C model), AM 1611kHz (Except U,C model) and adjust L9 so the voltage at TP1 is 8.0±0.05V. After adjustment is completed, check that it is 0.5V or more at TP1 with the AM 530kHz(U,C model), AM 531kHz(Except U,C model) signal.

2. FM VT Adjustment
   Settings : · Test point : TP1
   · Adjustment location : L3
   Method : Tune to FM 108.1MHz(U,C model), FM 108MHz (Except U,C model) and adjust L3 so the voltage at TP1 is 9.0±0.05V. After adjustment is completed, check that it is 1.0V or more at TP1 with the FM 87.5MHz signal.

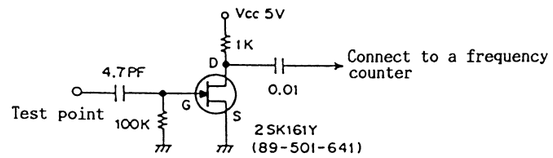
3. AM IF Adjustment
   L10 · · · · · · · · · · · · · · · · 450kHz

4. FM IF Offset Adjustment
   Settings : · Input signal : 98.1MHz(U,C model), 54dB
   98.0MHz(Except U,C model), 54dB
   · Test point : TP2
   · Adjustment location : L11
   Method : Adjust L11 so the voltage at TP2 is 0±25mV.

5. AM Tracking Adjustment
   L8 · · · · · · · · · · · · · · · 600kHz(U,C model)
   603kHz(Except U,C model)
   TC3 · · · · · · · · · · · · · · · 1400kHz(U,C model)
   1395kHz(Except U,C model)

6. FM Tracking Adjustment
   L2 · · · · · · · · · · · · · · · 87.5MHz
   TC1 · · · · · · · · · · · · · · · 108.1MHz(U,C model)
   108.0MHz(Except U,C model)

7. FM VCO Adjustment
   Settings : · Test point : TP3
   · Adjustment location : SFR1
   Method : Connect a buffer to TP3. Adjust SFR1 so the frequency at TP3 is 19kHz±20Hz.



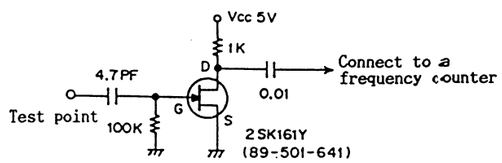
8. Tape Speed Adjustment
   Settings : · Test tape : TTA-100(TTA-111S)
   · Adjustment location : SFR103
   Method : Play back the test tape, adjust for 3000Hz.

9. Azimuth Adjustment
   Settings : · Test tape : TTS-310(TTA-317E)
   · Adjustment location : Azimuth adjustment screw
   Method : Play back the 10kHz signal of the test tape, and adjust so that the output becomes maximum.

10. Motor Load Adjustment
    Refer to the service manual of HS-T23.T230/HS-T26.T260.

11. Dolby Level Adjustment
    Settings : · Test tape : TTS-200(TTA-161,TCC-130)
    · Test point : TP101(Lch), TP102(Rch)
    · Adjustment location : SFR101(Lch)
    SFR102(Rch)
    Method : Adjust SFR101(102) so the voltage at TP101 (102) is 100mV±5mV.

12. Clock Adjustment
    Settings : · Test point : TP4
    · BAND SW : AM 1611kHz(Except U,C model)
    1610kHz(U,C model)
    · Adjustment location : TC4
    Method : · Connect a buffer to TP4. Adjust TC4 so the frequency at TP4 is 2061kHz±10Hz(Except U,C model), 2060kHz±10Hz(U,C model).



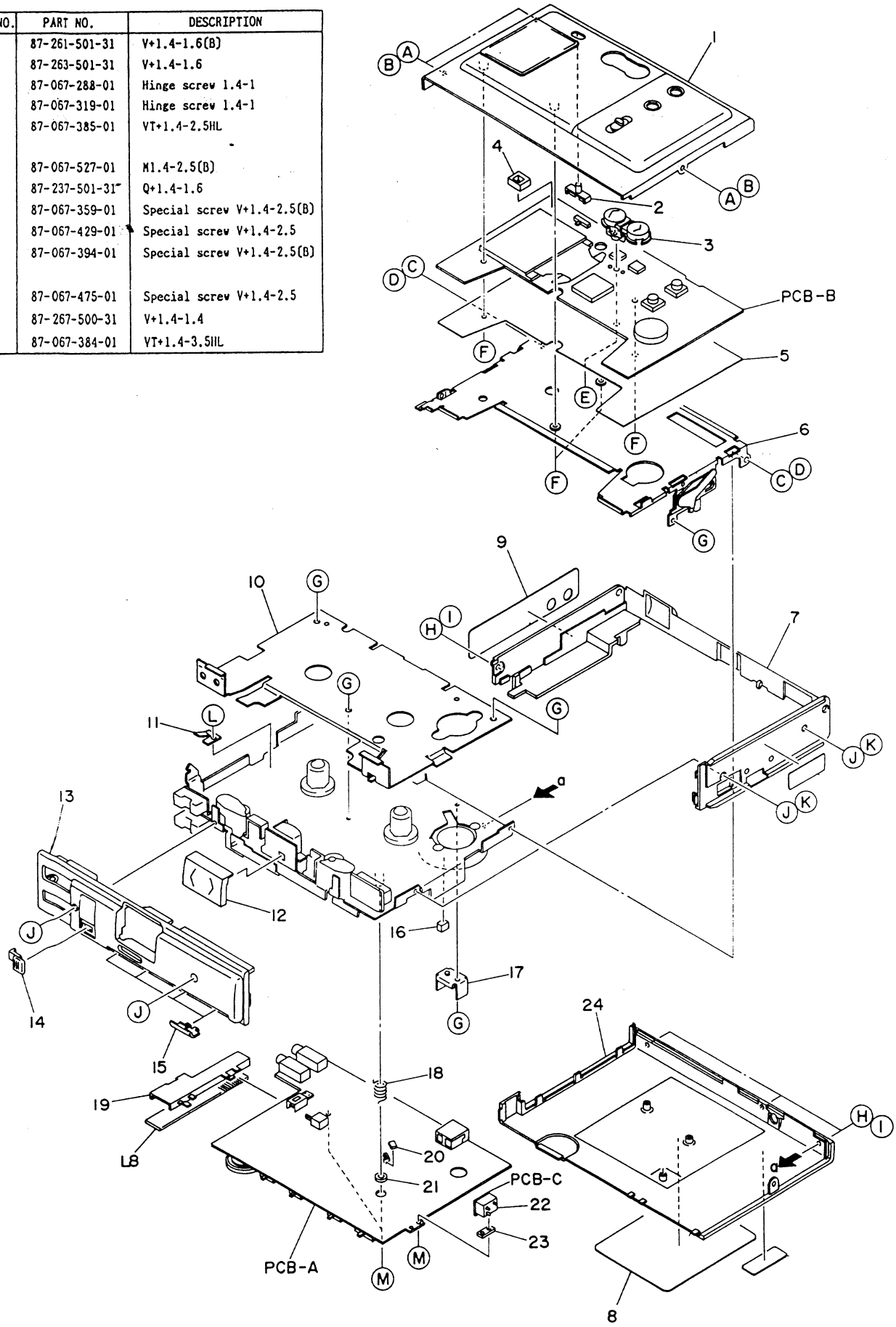
IC DESCRIPTION

1. IC,TC9308F-009

Pin No.	Pin Name	Description	
58	COM 1	Common output terminal	LCD drive output terminal
19	COM 2	Common output terminal	
59, 60 1~18	$S_1 \sim S_{20}$	Segment output terminal	
20	STOP IN	Goes high during motor rotation. Goes low when motor stops.	Display input terminal
21	DIR IN	Goes high in FWD/FF and REV/REW modes. Goes low otherwise.	
31	PLAY IN	Mechanism head-up operation. Goes low when motor is turned on.	
32	F/R-IN	Goes high in FWD mode. Goes low in REV mode.	
22	K_2	——— ——— ——— DOWN	Key matrix
24	K_3	STOP MEMORY REC UP	
25	T_0	H L L L	
26	T_1	L H L L	
27	T_2	L L H L	
28	T_3	L L L H	
29, 30	I_{01} I_{00}	I_{01} / I_{00} / Mode: H / L / AM; L / H / FM	Band select terminal.
33	FUNC IN	Goes high in RADIO mode.	
34	AUTO STOP	Goes low when a signal is received during AM/FM AUTO tuning.	
35 36	E_0 E_1	Bandwidth/tuning step select terminal.	
37	———	Not used.	
38	Mute	Mute output terminal. Muted in high level.	
39	FM OUT	Outputs a high signal when the band switch is set to FM.	
40	———	Not used.	
41	———	Not used.	
42, 43	D_{01}, D_{02}	Phase detector's error output terminal. A pulse is output to LPF.	
44	AM IN	AM OSC input terminal	
45	PSC	PSC output terminal	
46	FM IN	Prescaler OUT input terminal	
48	INH	PLL is activated when high. PLL is stopped when low (backup mode).	
50, 51	$\overline{XT}$, XT	Used to connect crystal oscillator.	
52	$\overline{INT}$	Initialize terminal. Initialized and set to the initial value when low. Memory is then cleared.	
53	V_{DD}	Power supply connection terminal	
54	VLCD	LCD step-up power supply	
55~57	$C_1 \sim C_3$	Capacitor connection terminal for LCD step-up power supply	

EXPLODED VIEW－1

REF.NO.	PART NO.	DESCRIPTION
A	87-261-501-31	V+1.4-1.6(B)
B	87-263-501-31	V+1.4-1.6
C	87-067-288-01	Hinge screw 1.4-1
D	87-067-319-01	Hinge screw 1.4-1
E	87-067-385-01	VT+1.4-2.5HL
F	87-067-527-01	M1.4-2.5(B)
G	87-237-501-31	Q+1.4-1.6
H	87-067-359-01	Special screw V+1.4-2.5(B)
I	87-067-429-01	Special screw V+1.4-2.5
J	87-067-394-01	Special screw V+1.4-2.5(B)
K	87-067-475-01	Special screw V+1.4-2.5
L	87-267-500-31	V+1.4-1.4
M	87-067-384-01	VT+1.4-3.5HL

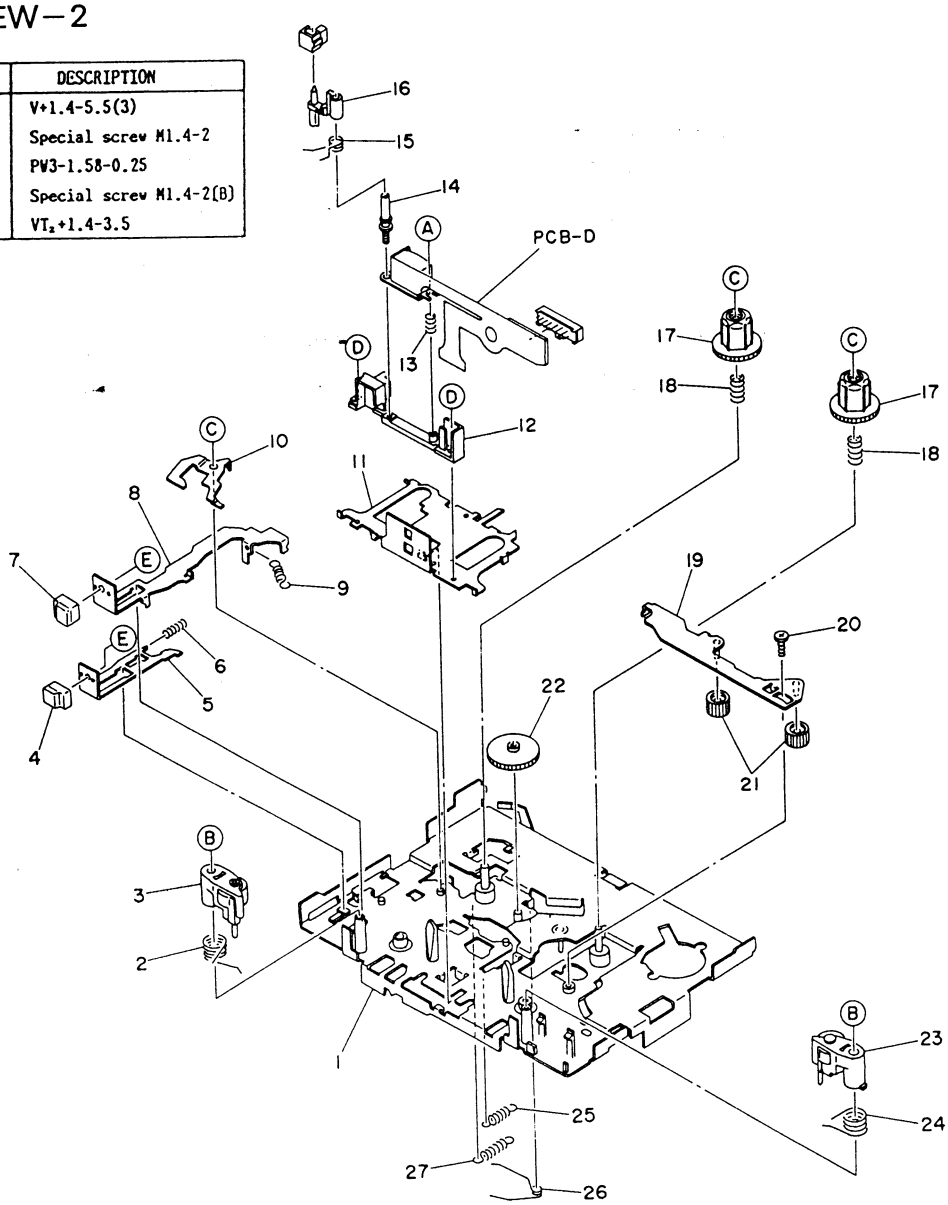


MECHANICAL PARTS LIST

PART NO. CHANGED TO	REF. NO.	PART NO.	DESCRIPTION	COMMON MODEL	Q, TY
	1-1	09-027-624-010	CASSETTE LID ASSY(B)	*	1
	1-1	09-027-628-010	CASSETTE LID ASSY(S)	*	1
	1-2	★84-462-021-010	KNOB,SLIDE C	*	1
	1-3	84-462-017-010	PUSH-KEY,TU	*	1
	1-4	★84-462-215-010	M CUSHION 1.3-16-2.5	*	1
	1-5	★84-462-205-010	INSULATION SHEET	*	1
	1-6	★84-462-211-010	HOLDER CASSETTE J ASSY	*	1
	1-7	★84-462-004-010	FRAME CENTER	*	1
	1-8	★84-462-048-010	PLATE SPEC.(B)(EXCEPT J202M,J800)	*	1
	1-8	★84-462-051-010	PLATE SPEC.(B)(J202M ONLY)	*	1
	1-8	★84-462-050-010	PLATE SPEC.(B)(J800 ONLY)	*	1
	1-8	★84-462-049-010	PLATE SPEC.(S)	*	1
	1-9	★84-462-044-010	PLATE,SIDE Y	*	1
	1-10	★84-463-012-110	DECORATE SHEET		1
	1-11	84-463-209-010	P-SPRING,POP UP		1
	1-12	84-462-008-010	PUSH-BUTTON,PLAY	*	1
	1-13	★84-462-002-010	PANEL,CONTROL	*	1
	1-14	★84-462-014-010	KNOB,DIRECTION	*	1
	1-15	★84-462-015-010	KNOB,SLIDE A	*	4
	1-16	★84-462-220-010	G CUSHION,6-6-2.7	*	1
	1-17	★84-462-204-010	HOLDER,JACK DC	*	1
	1-18	★84-462-218-010	C-SPRING,MECHANISM EARTH A	*	1
	1-19	★84-462-210-010	HOLDER,BAR ANT	*	1
	1-20	★84-462-207-010	SHEET,SENSOR	*	1
	1-21	★84-462-212-010	SHEET,BOSS	*	1
	1-22	★84-435-246-110	TERMINAL ASSY	HS-J101	1
	1-23	★84-462-206-010	SPACER,CONTACT	*	1
	1-24	★84-462-041-010	CABINET REAR Y(B)	*	1
	1-24	★84-465-039-010	CABINET REAR R(S)	HS-T202	1

EXPLODED VIEW—2

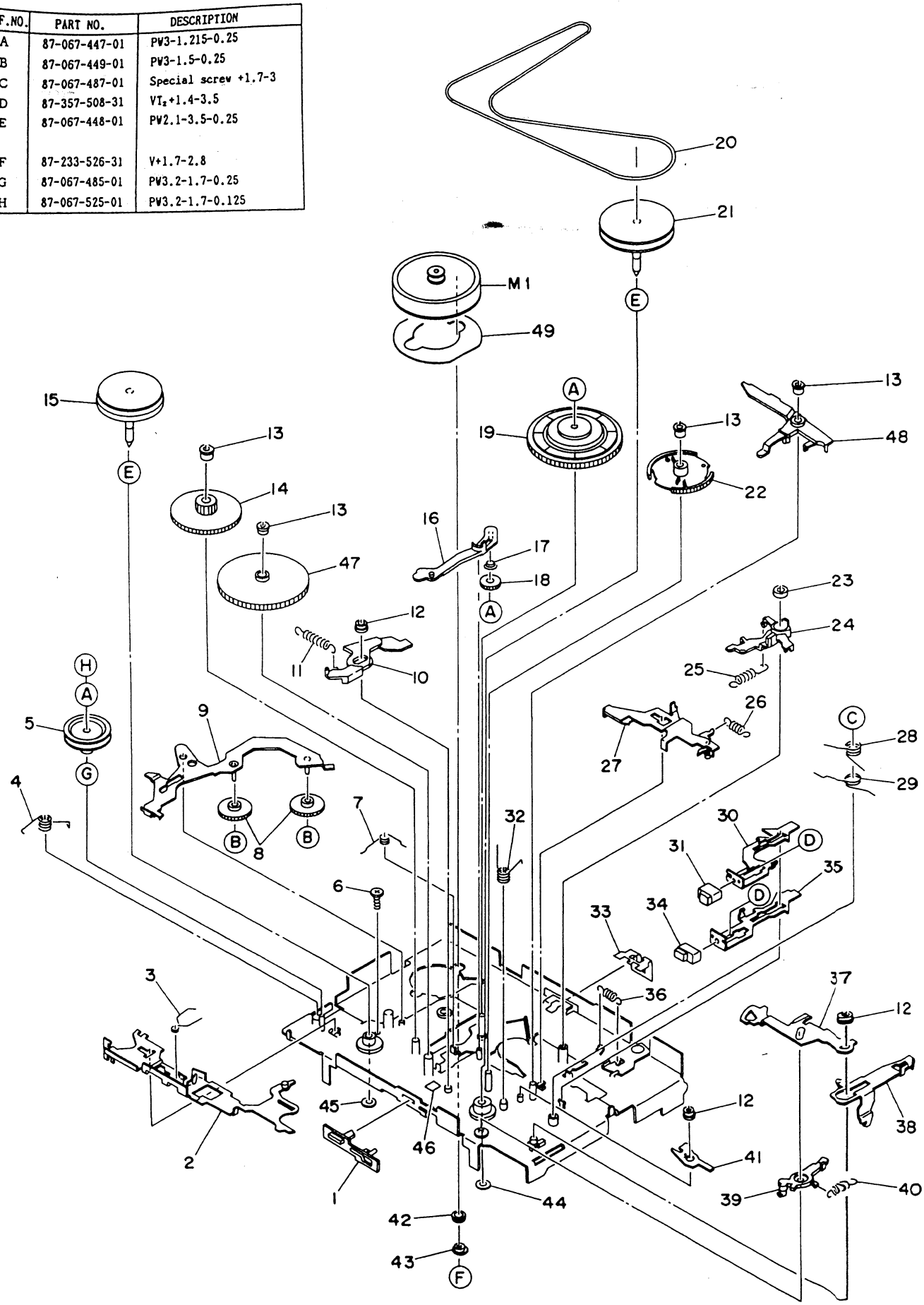
REF.NO.	PART NO.	DESCRIPTION
A	87-268-512-31	V+1.4-5.5(3)
B	87-067-517-01	Special screw M1.4-2
C	87-067-516-01	PW3-1.58-0.25
D	87-067-511-01	Special screw M1.4-2(B)
E	87-357-508-31	VT_2+1.4-3.5



PART NO. CHANGED TO	REF. NO.	PART NO.	DESCRIPTION	COMMON MODEL	Q'TY
	2-1	★86-541-210-210	OUTSERT CHASSIS ASSY		1
	2-2	★86-541-338-010	T-SPRING,PINCH R P		1
	2-3	86-541-218-010	PINCH LEVER R ASSY		1
	2-4	★84-462-009-010	PUSH-BUTTON,STOP	*	1
	2-5	★86-541-261-110	PLATE,BUTTON STOP		1
	2-6	★86-541-329-010	C-SPRING,STOP		1
	2-7	★84-462-010-110	PUSH-BUTTON,REC		1
	2-8	★86-541-274-010	PLATE,BUTTON REC B		1
	2-9	★86-541-312-010	E-SPRING,REC LOCK		1
	2-10	★86-541-277-010	LEVER,REC LOCK		1
	2-11	★86-541-260-210	CHASSIS,ACTUATING		1
	2-12	★86-541-283-010	TAPE GUIDE		1
	2-13	★86-541-318-010	C-SPRING,AZIMUTH		1
	2-14	★86-541-369-010	SCREW EH M1.4		1
	2-15	★86-541-344-010	T-SPRING,EH LEVER		1
	2-16	★86-541-287-010	LEVER EH		1
	2-17	★86-541-236-010	GEAR,REEL PLATFORM		2
	2-18	★86-541-328-010	C-SPRING,REEL PLATFORM		2
	2-19	★86-541-221-110	PLATE FR ASSY		1
	2-20	★86-541-383-010	SCREW FR		1
	2-21	★86-541-244-010	GEAR FR		2
	2-22	★86-541-239-010	GEAR REW		1
	2-23	86-541-216-010	PINCH LEVER F ASSY		1
	2-24	★86-541-314-010	T-SPRING,PINCH F R		1
	2-25	★86-541-331-010	E-SPRING,ACTUATING		1
	2-26	★86-541-347-110	T-SPRING,FR LEVER		1
	2-27	★86-541-336-010	E-SPRING,REC		1

EXPLODED VIEW—3

REF.NO.	PART NO.	DESCRIPTION
A	87-067-447-01	PW3-1.215-0.25
B	87-067-449-01	PW3-1.5-0.25
C	87-067-487-01	Special screw +1.7-3
D	87-357-508-31	VT_2+1.4-3.5
E	87-067-448-01	PW2.1-3.5-0.25
F	87-233-526-31	V+1.7-2.8
G	87-067-485-01	PW3.2-1.7-0.25
H	87-067-525-01	PW3.2-1.7-0.125



PART NO. CHANGED TO	REF. NO.	PART NO.	DESCRIPTION	COMMON MODEL	Q, TY
	3-1	★84-462-013-010	KNOB,DIRECTION MODE	*	1
	3-2	★86-541-222-110	PLATE,PINCH SELECT ASSY		1
	3-3	★86-541-320-310	T-SPRING,PLAY LEVER		1
	3-4	★86-541-313-010	T-SPRING,PINCH SELECT		1
	3-5	86-541-235-010	PULLEY RELAY B		1
	3-6	★86-541-383-010	SCREW FR		1
	3-7	★86-541-334-110	T-SPRING,AUTO LEVER		1
	3-8	★86-541-242-210	GEAR,PLAY		2
	3-9	★86-541-219-310	LEVER PLAY ASSY		1
	3-10	★86-541-288-110	LEVER,MODE SELECT		1
	3-11	★86-541-341-010	E-SPRING,MODE SELECT		1
	3-12	86-541-376-010	COLLAR,PW-BOARD P		3
	3-13	86-541-367-010	COLLAR,PW-BOARD J		4
	3-14	86-541-240-010	GEAR,SLOW-DOWN		1
	3-15	86-541-213-010	FLYWHEEL ASSY FB		1
	3-16	★86-541-285-010	LEVER,AUTO		1
	3-17	★86-541-325-010	C-SPRING,AUTO GEAR		1
	3-18	★86-541-241-010	GEAR,AUTO		1
	3-19	86-541-206-010	GEAR CLUTCH ASSY		1
	3-20	86-541-371-010	BELT B1		1
	3-21	86-541-214-010	FLYWHEEL ASSY RB		1
	3-22	★86-541-238-110	GEAR,SELECT CAM R		1
	3-23	★84-462-208-010	SPACER,BOSS	*	1
	3-24	★86-541-291-010	LEVER,REC EJECT BR		1
	3-25	★86-541-297-010	E-SPRING,REC EJECT		1
	3-26	★86-541-332-010	E-SPRING,PLATE LOCK		1
	3-27	★86-541-223-110	PLATE EJECT ASSY A		1
	3-28	★86-541-349-010	T-SPRING,FR BUTTON		1
	3-29	★86-541-339-010	T-SPRING,TRIGGER		1
	3-30	★86-541-264-010	PLATE,BUTTON REW		1
	3-31	★84-463-011-010	PUSH-BUTTON,REW	HS-PC202	1
	3-32	★86-541-345-110	T-SPRING,SELECT CAM		1
	3-33	★86-541-323-010	P-SPRING,CASSETTE SUPPORT		1
	3-34	★84-463-010-010	PUSH-BUTTON,FF	HS-PC202	1
	3-35	★86-541-262-010	PLATE,BUTTON FF		1
	3-36	★86-541-330-010	E-SPRING,REC BLOCKING		1
	3-37	★86-541-278-110	LEVER,EH RESET		1
	3-38	★86-541-263-010	PLATE,EJECT		1
	3-39	★86-541-286-010	LEVER,DIRECTION		1
	3-40	★86-541-343-010	E-SPRING,DIRECTION		1
	3-41	★86-541-273-010	LEVER,TRIGGER LOCK		1
	3-42	★86-511-445-110	G CUSHION,MOTOR		1
	3-43	★86-511-441-110	COLLAR,MOTOR		1
	3-44	★87-067-484-010	SOMA SHEET 3.5-1.64-0.25		1
	3-45	★87-067-521-010	SOMA SHEET 3.5-1.45-0.25		1
	3-46	★86-541-397-010	SHEET 3-5		1
	3-47	★86-541-237-010	GEAR,AUTO CAM		1
	3-48	★86-541-284-110	LEVER,TRIGGER		1
	3-49	★86-541-394-010	SHIELD PLATE		1
		★09-027-568-010	COLLAR PW-BOARD (PJ) KIT		1

■ ACCESSORIES/PACKAGE LIST

PART NO. CHANGED TO	REF. NO.	PART NO.	DESCRIPTION	COMMON MODEL	Q, TY
	1	★84-462-904-010	INSTRUCTION BOOKLET Y	*	1
	2	★84-462-905-010	INSTRUCTION BOOKLET Y(M) (EXCEPT AUB,AK1B)	*	1
	3	★84-465-041-010	BATT.BOX(PB-2Y)A(S) (AHS,AES,AZS,AH1S ONLY)	HS-T202	1
	4	★84-465-042-010	BATT.BOX(PB-2Y)B(S) (AHS,AES,AZS,AH1S ONLY)	HS-T202	1
	5	★84-462-018-010	BATT.BOX(PB-2Y)A (EXCEPT AHS,AES,AZS,AH1S)	*	1
	6	★84-462-019-010	BATT.BOX(PB-2Y)B (EXCEPT AHS,AES,AZS,AH1S)	*	1
	7	★84-435-241-010	CUSHION 5-6-3		1
	8	★09-027-626-010	BATT.BOX ASSY(S) (AHS,AES,AZS,AH1S ONLY)		1
	9	★09-027-627-010	BATT.BOX ASSY(S) (EXCEPT AHS,AES,AZS,AH1S)		1
	10	★84-462-952-010	CARRYING CASE Y	*	1
	11	87-041-056-010	MIC CM-S20		1
	12	87-042-046-010	AC-205H(AHS,AHB,MAHB,AH1S,AH1B ONLY)		1
	13	87-042-047-010	AC-205U(AUB ONLY)		1
	14	87-042-040-110	AC-205C(ACB ONLY)		1
	15	87-042-048-010	AC-205E(AES,AEB,AZB,AZS ONLY)		1
	16	87-042-042-110	AC-205K(AK1B ONLY)		1
	17	★87-047-095-010	PB-2Y		1
	18	87-048-134-010	HP-M13(EXCEPT AK1B,AH1S,AH1B)		1
	19	87-048-148-010	HP-08K(AK1B,AH1S,AH1B ONLY)		1